

NURSE ANESTHESIA PRACTICE (DNAP)

DNAP 701. Human Factors and Patient Safety for Nurse Anesthetists. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Explores the theoretical basis of human error, patient safety and quality assurance in anesthesia care. Introduces a systems approach to error investigation and analysis. Integrates concepts of teamwork, crisis management, simulation and monitoring systems in anesthesia practice.

DNAP 702. Nurse Anesthesia Patient Safety Seminar. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Focuses on analysis of adverse anesthesia events from a systems perspective, use of multidisciplinary teams to solve management problems and constructive techniques for communicating with patients, families and health care providers who are involved in medical errors.

DNAP 703. Health Services Delivery Systems for the Nurse Anesthetist. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Provides the necessary scientific foundation, both in theory and practice application, to explore the structure and function of the U.S. health care delivery system as it specifically relates to specialized nurse anesthesia practice, the components of select theories and the translation of these theories to practice.

DNAP 704. Advanced Physiology/Pathophysiology for Nurse Anesthetists I. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Examines normal human physiology and pathophysiology using a body-systems approach, with emphasis on the interrelationships between form and function at the gross and cellular levels of organization. Includes analysis of cellular structure and function as well as the individual components of body systems.

DNAP 705. Advanced Physiology/Pathophysiology for Nurse Anesthetists II. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: DNAP 704. Examines normal human physiology and pathophysiology using a body-systems approach with emphasis on the interrelationships between form and function at the gross and cellular levels of organization. Includes an analysis of cellular structure and function as well as the individual components of body systems. Incorporates an overview of genetics.

DNAP 706. Advanced Pharmacology for Nurse Anesthetists I. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Provides an opportunity to focus on the advanced principles of anesthesia related to pharmacology. Presents in-depth material on the pharmacology of various classes of anesthetics and adjuvant therapeutics employed by nurse anesthetists, with an emphasis on general anesthetics.

DNAP 707. Advanced Pharmacology for Nurse Anesthetists II. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: DNAP 706. Provides an opportunity to focus on the advanced principles of anesthesia-related pharmacology. Includes discussions on adjuvant therapeutics employed by nurse anesthetists, with an emphasis on local anesthetics.

DNAP 708. Ethics and Health Care. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Applies the principles of biomedical and health care ethics to develop a more informed understanding of ethical decision-making in the formulation of health care policy as well as within the clinical environment. Focuses on utilizing and searching biomedical ethics literature, current issues in biomedical ethics, the discipline and process of ethical reflection, and case consultation.

DNAP 711. Policy and Practice for Nurse Anesthetists. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Examines governmental and non-governmental issues that influence nurse anesthesia practice. Focuses on developing skills that contribute to leadership and personal effectiveness in implementing change in nurse anesthesia and health care. Emphasizes interdisciplinary relationships between CRNAs, nurses, physicians, administrators, policy-makers and other key stakeholders.

DNAP 712. Leadership in Nurse Anesthesia Education. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Examines principles of teaching and learning applicable to the anesthesia didactic and clinical environment. Presents strategies in teacher/learner communication, presentation development and strategies, curriculum design and methods of evaluation pertinent to nurse anesthesia education.

DNAP 716. Advanced Chemistry and Physics Concepts for Nurse Anesthetists. 1 Hour.

Semester course; 1 lecture hour. 1 credit. Provides advanced theoretical foundations of chemistry, biochemistry and physics relevant for critical application to the practice of anesthesia nursing utilizing the hybrid (blended learning) format.

DNAP 717. Advanced Physiological Concepts for Nurse Anesthetists. 2 Hours.

Semester course; 2 lecture hours. 2 credits. Explores properties of advanced physiology including physiology terms, levels of organization of the human body, homeostasis and feedback systems, anatomic terms, planes and sections, cell physiology and diffusion, transport systems, pressure-volume relationships, pressure-flow-resistance relationships, Fick's principle, the Frank-Starling relationship, and math for physiology utilizing the hybrid (blended learning) format.

DNAP 718. Advanced Health Assessment for Nurse Anesthetists. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Provides a systematic, evidence-based, advanced physical, psychosocial and cultural evaluation of human systems to acquire and analyze relevant information for the development of a comprehensive patient assessment. Emphasizes advanced preoperative and postoperative techniques in a process whereby the learner translates information pertinent to anesthesia care into practice. Focuses on the symptom and health problem assessment and selection and interpretation of screening and diagnostic tests in order to implement an informed plan of care. Utilizes the hybrid (blended learning) format.

DNAP 721. Clinical Practicum I. 3 Hours.

Semester course; 3 practicum hours (300 clocked clinical hours). 3 credits. Introduces clinical care with supervised participation in actual administration of anesthesia. Demonstrates internalization of theoretical concepts and techniques and application in anesthetic management toward the achievement of the terminal objectives for competency in entry-level anesthesia practice. Graded as pass/fail.

DNAP 722. Clinical Practicum II. 4 Hours.

Semester course; 4 practicum hours (400 clocked clinical hours). 4 credits. Prerequisite: DNAP 721. Introduces clinical care with supervised participation in actual administration of anesthesia. Demonstrates internalization of theoretical concepts and techniques and application in anesthetic management toward the achievement of the terminal objectives for competency in entry-level anesthesia practice. Graded as pass/fail.

DNAP 723. Clinical Practicum III. 5 Hours.

Semester course; 5 practicum hours (500 clocked clinical hours). 5 credits. Prerequisite: DNAP 722. Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum. Graded as pass/fail.

DNAP 724. Clinical Practicum IV. 5 Hours.

Semester course; 5 practicum hours (500 clocked clinical hours). 5 credits. Prerequisite: DNAP 723. Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum. Graded as pass/fail.

DNAP 725. Clinical Practicum V. 5 Hours.

Semester course; 5 practicum hours (500 clocked clinical hours). 5 credits. Prerequisite: DNAP 724. Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum. Graded as pass/fail.

DNAP 731. Professional Aspects of Nurse Anesthesia Practice. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Provides an opportunity to focus on a variety of professional issues including but not restricted to the history of nurse anesthesia, professional practice roles, settings and responsibilities of the nurse anesthetist, effective communications, accountability and patient advocacy, cultural competency, professional involvement, code of ethics, regulations, and standards of practice using a hybrid (blended learning) format.

DNAP 733. Evidence-based Decision-making in Nurse Anesthesia. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Provides a foundation of literature relevant to nurse anesthesia practice. Emphasizes a systematic framework that is termed "evidence-based practice" for clinical interventions and critiquing the literature in an appropriate and manageable fashion. Culminates in a broad overview of scientific foundations for nurse anesthesia practice in selected domains. Utilizes the hybrid (blended learning) format.

DNAP 734. Research Methods and Statistical Measures in Nurse Anesthesia Practice. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Examines relationships among theory, research and causal inference; quantitative and qualitative methodologies will be considered. Surveys issues relevant to research design, measurement, data collection, statistical analysis, interpretation and ethical issues in conducting research — and grounded in work in the domain of anesthesia and critical care. Prepares students to access, critically evaluate and utilize research-based literature and independently initiate a systematic approach to addressing a research hypothesis or research question. Utilizes a hybrid (blended learning) format.

DNAP 735. Principles and Practice of Nurse Anesthesia Practice I. 4 Hours.

Semester course; 3 lecture and 3 laboratory hours. 4 credits. Introduces the nurse anesthesia student to concepts necessary to plan and execute safe and individualized anesthetics. Covers formulation of the anesthesia care plan, anesthetic techniques, prevention of complications, fluid management, monitoring and utilization of anesthesia equipment. Provides guided practical experience associated with course concepts, including practice with and evaluation of task-specific skills in both simulated and actual operating room environments.

DNAP 736. Principles and Practice of Nurse Anesthesia II. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: DNAP 735. Delineates techniques of anesthesia management that are considered situation-specific for specialized procedures, diagnostic or individualized procedures, including advanced airway management and anesthesia care individualized for the patient with cardiovascular or respiratory conditions.

DNAP 737. Principles and Practice of Nurse Anesthesia III. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: DNAP 736. Presents fundamental concepts and techniques essential to clinical anesthesia practice focusing on the theoretical and practical considerations involved in the administration and management of regional anesthesia and pain management.

DNAP 738. Principles and Practice of Nurse Anesthesia IV. 2 Hours.

Semester course; 2 lecture hours. 2 credits. Prerequisite: DNAP 737. Covers the advanced concepts and principles of anesthetic management in obstetrics, pediatrics, hematologic disorders and endocrine disorders.

DNAP 739. Principles and Practice of Nurse Anesthesia V. 2 Hours.

Semester course; 2 lecture hours. 2 credits. Prerequisite: DNAP 738. Covers the advanced concepts and principles of anesthetic management including anesthesia delivery in specialty settings and other specialty topics.

DNAP 789. Nurse Anesthesia Professional Practice. 1-6 Hours.

Semester course; 1-6 clinical hours (100 clocked clinical hours per credit). 1-6 credits. May be repeated for a maximum of six credits. Emphasizes analysis and evaluation of experiential learning through the use of critical-thinking skills and reflection. Explores concepts of competency and expertise. Focuses on methods of determining best anesthesia practices through identification of problems, review and systematic evaluation of current research, and consideration of economic and other factors that may impact patient outcomes. Graded as pass/fail.

DNAP 799. Nurse Anesthesia Doctoral Project. 1-6 Hours.

Semester course; 1-6 practicum hours. 1-6 credits. May be repeated for a maximum of six credits. Focuses on identification of relevant clinical issues in anesthesiology with attendant formulation of critically applicable questions and examination of the relevant research evidence that addresses those questions. Students implement and evaluate a terminal project and disseminate the results through an oral and/or poster presentation, manuscript submission to a peer-reviewed journal or another appropriate medium. Graded as S, U or F.